



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/534,474	03/24/2000	Debra L. Woods	WOO001	3349

7590 10/29/2002

The Law Office of Everett G. Diederiks JR
12471 Dillingham Square #301
Woodbridge, VA 22192

[REDACTED] EXAMINER

LAO, LUN YI

ART UNIT	PAPER NUMBER
2673	

DATE MAILED: 10/29/2002

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER OF
PATENTS AND TRADEMARKS
Washington, D.C. 20231

MAILED

OCT 29 2002

Technology Center 2600

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Paper No. 15

Application Number: 09/534,474

Filing Date: 3/24/2000

Appellant(s): Woods

Everett G. Diederiks, Jr.
For Appellant

EXAMINER'S ANSWER

This is in response to appellant's brief on appeal filed on September 30, 2002.

(1) ***Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

(2) ***Related Appeals and Interferences***

A statement identifying the real party in interest is contained in the brief.

(3) ***Status of Claims***

The statement of the status of the claims contained in the brief is correct.

(4) ***Status of Amendments After Final***

No amendment after final has been filed.

Art Unit: 2673

(5) Summary of Invention

The summary of invention contained in the brief is correct.

(6) Issues

The appellant's statement of the issues in the brief is substantially correct.

(7) Grouping of Claims

Appellant's brief includes a statement that claims 1; 2; 12; 15; 16; 19; 20; 21; 22; 7-10; and 13, 17 and 18 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

(8) ClaimsAppealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

NUMBER	NAME	DATE
4,211,497	Montgomery	07/1980
5,557,299	Maynard et al	09/1996
5,620,267	Klauber	04/1997
5,739,776	Chen	04/1998
6,107,994	Harada et al	08/2000
JP8-249097	Watanabe	9/1996

Microsoft Press (Computer Dictionary) Third Edition, 1997, Pages 21, 22 and 433.

(10) Grounds of Rejection

Art Unit: 2673

The following ground(s) of rejection are applicable to the appealed claims:

I. Claims 7-10, 12 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al(JP 08249097) in view of Chen(5,739,776).

As to claims 7-10, 12 and 21, Watanabe et al teach a keyboard comprising a plurality of keys arranged in an array on an upper side of a base(see figure 1). The keys includes letter keys, a tab key(TA), a backspace key(BS), a shift key(SH) and a function key(23, 24), wherein both tab(TA) and backspace keys(BS) are centrally located within the letter keys and above the home row(see figures 1, 3 and claim 2).

Watanabe et al fail to disclose a tab key is located on the same row of the backspace key.

As to claims 7-9, 10-12 and 21, Chen teaches a keyboard comprising a tap key(15) in the same row to a backspace key(16)(see figures 1, 4 and column 2, lines 39-49). It would have been obvious to have modified Watanabe et al with the teaching of Chen, since Watanabe has been disclosed the locations of the tab key and the backspace key on a keyboard would be changed(see figures 1, 5b)(the locations of the tab key and the backspace key in Fig. 1 are different from the the locations of the tab key and the backspace key in Fig. 6), the function of a key would not be effected by moving a backspace key down one row and a change in location is generally recognized as being within the level of ordinary skill in the art. In re Japikse, 86 USPQ 70 (CCPA 1950).

As to claim 9, Watanabe et al teach a tab key(TA) is on the left of the backspace key(BS)(see figure 1).

Art Unit: 2673

As to claim 21, Watanabe et al teach a tab key(TA) is located directly above the home row and a backspace key(BS) located above a tab key(TA)(see figure 1) and Chen teaches a keyboard comprising a tap key(15) same row to a backspace key(16)(see figures 1, 4 and column 2, lines 39-49). Therefore, the combination of Watanabe et al and Chen could have a tab key and backspace key located directly above the home row since the function of a backspace key would not be effected by moving a backspace key down one row, since Watanabe has been disclosed the locations of the tab key and the backspace key on a keyboard would be changed(see figures 1, 5b)(the locations of the tab key and the backspace key in Fig. 1 are different from the the locations of the tab key and the backspace key in Fig. 5b), and a change in location is generally recognized as being within the level of ordinary skill in the art. In re Japikse, 86 USPQ 70 (CCPA 1950).

II. Claim 13, 15, 16, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al (JP 08249097) in view of Harada et al(6,107,994) and Microsoft Press Computer Dictionary(Third Edition).

See the discussion of Watanabe et al above. Watanabe et al teach a keyboard having two shift keys(SH) and two ALT keys adjacent one another are operated by thumbs of a user(see figure 1 and claim 2).

Watanabe et al fail to disclose three shift keys arranged in two rows.

Harada et al teach shift keys and alternate keys arranged in two rows(see figure 3) and shift keys for entering capital letters in cooperating with the letter keys(see column 7, lines 12-

Art Unit: 2673

15). It would have been obvious to rearranged shift keys and alternate keys adjacent to each other in one row into two rows, since Watanabe has been disclosed the locations of the shift keys and alternate keys on a keyboard would be changed(see figures 1, 5b)(the locations of the shift keys and alternate keys in Fig. 1 are different from the the locations of the shift keys and alternate keys in Fig. 5b), the function of a key would not be effected, those keys still could be operated by thumbs of a user and a change in location is generally recognized as being within the level of ordinary skill in the art. In re Japikse, 86 USPQ 70 (CCPA 1950).

It would have been obvious to replace ALT keys by shift keys since they both having same function(they both used in combination of another key to produce some special feature or function)(see Microsoft Press Computer Dictionary(Third Edition) pages 21, 22 and 433).

III. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al (JP 08249097) in view of Harada et al(6,107,994), Microsoft Press Computer Dictionary(Third Edition) and Maynard et al(5,557,299).

Watanabe et al as modified fail to disclose shift keys are color coded.

Maynard et al teach a keyboard having a color code(Green, Red, Blue, Yellow)(see figure 5; column 5, lines 57-68 and column 6, lines 1-36). It would have been obvious to have modified Watanabe et al as modified with the teaching of Maynard et al, so a user can first easily locate the type of key by its color(see column 5, lines 65-68 and column 6, line 1).

IV. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable Watanabe et al

Art Unit: 2673

(JP 08249097) in view of Harada et al(6,107,994) and Microsoft Press Computer Dictionary(Third Edition) and Montgomery(4,211,497).

See the discussion of Watanabe et al (JP 08249097), Harada et al(6,107,994) and Microsoft Press Computer Dictionary(Third Edition) above.

Watanabe et al fail to disclose at least three multi-letter words would be come out when read one of rows of selected letter keys from left to right.

Montgomery teaches a keyboard having two multi-letter words(I T H E R) came out when read one of rows of selected letter keys from left to right(see figure 12). It would have been obvious to have modified Watanabe et al as modified with the teaching of Montgomery, so as to increase the speed of typing common words(see Montgomery's column 2, lines 60-61), since Watanabe has been disclosed the locations of keys on a keyboard would be changed(see figures 1, 5b), the function of a key would not be effected by changing location of the key and a change in location is generally recognized as being within the level of ordinary skill in the art. In re Japikse, 86 USPQ 70 (CCPA 1950).

It would have been obvious to put three sequential common words in one row since there would be more convenience for a user to locate those common words; e.g. ITHEROF; so as to increase typing speed words(see Montgomery's column 2, lines 60-61), since Watanabe has been disclosed the locations of keys on a keyboard would be changed(see Watanabe's figures 1, 5b), the function of a key would not be effected by changing location of the key and a change in

Art Unit: 2673

location is generally recognized as being within the level of ordinary skill in the art. In re Japikse, 86 USPQ 70 (CCPA 1950).

V. Claims 2 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klauber(5,620,267) in view of Montgomery(4,211,497).

As to claims 2 and 22, Klauber teaches a keyboard comprising a plurality of keys arranged in an array on an upper side of a base(see figure 1). The keys includes letter keys, a tab key(TAB), a backspace key, a shift key(shift) and a function key(F1-F12)(see figures 6-7).

Klauber fails to disclose at least three multi-letter words would be come out when read one of rows of selected letter keys from left to right.

Montgomery teaches a keyboard having two multi-letter words(P I T H E RB) came out when read one of rows of selected letter keys from left to right(see figure 12). It would have been obvious to have modified Klauber as modified with the teaching of Montgomery, so as to increase the speed of typing common words(see Montgomery's column 2, lines 60-61), since Klauber has been disclosed the locations of keys on a keyboard would be changed(see Klauber's figures 1, 7, 9, 10), the function of a key would not be effected by changing location of the key and a change in location is generally recognized as being within the level of ordinary skill in the art. In re Japikse, 86 USPQ 70 (CCPA 1950).

It would have been obvious to put three sequential common words in one row since there would be more convenience for a user to locate those common words; e.g. ITHEROF; so as to increase typing speed(see Montgomery's column 2, lines 60-61), since Watanabe has been

Application Number: 09/534,474

Art Unit: 2673

disclosed the locations of keys on a keyboard would be changed(see Watanabe's figures 1, 6), the function of a key would not be effected by changing location of the key and a change in location is generally recognized as being within the level of ordinary skill in the art. In re Japikse, 86 USPQ 70 (CCPA 1950).

As to claim 22, Montgomery teaches one of the multi-letter words is a four letter word(HERB) and another of the multi-letter words is three letter word(PIT)(see figure 18).

(11) *Response to Argument*

Appellant argues the 112, first paragraph rejection is improper on pages 10-12. However, this rejection has been withdrawn by the examiner on the examiner's answer.

Appellant argues that the rejection of claim 7 has been changed to the patent of Chen which was never relied upon in the earlier office action on page 12. That is not true since claim 7 has been rejected by the references of Watanabe et al and Chen(see last line of the page 2 to page 3, lines 8-11 of the office action mailed on January 11, 2002). However, there is a mistake on the first line of page 3, Montogmery(4,211,497) should be Chen(5,739,776).

Appellant argues that moving a backspace key down one row would be require arrangement of many of keys on page 13. That is not true since it only need to switch a position of a backspace key with an enter key or simply just have one mor backspace key next to a tap key since an enter keys occupies two key space(see figure 1).

Appellant argues that the combination of Watanabe et al and Chen do not teach both tab and backspace keys are centrally located within the letter keys and located in a row above the home row on pages 13-15. The examiner disagrees with that since Watanabe et al teach both

Application Number: 09/534,474

Art Unit: 2673

tab(TA) and backspace keys(BS) are centrally located within the letter keys and above the home row(see figure 1, claim 2) and Chen teaches a tap key(15) is in the same row of a backspace key(16)(see figures 1, 4 and column 2, lines 39-49). Watanabe has been disclosed the locations of the tab key and the backspace key on a keyboard would be changed(see figures 1, 6)(see the rejection of claim 7 above) and a change in location is generally recognized as being within the level of ordinary skill in the art. In re Japikse, 86 USPQ 70 (CCPA 1950). Therefore, the combination of Watanabe et al and Chen teach both tab and backspace keys are centrally located within the letter keys and located in a row above the home row.

Appellant argues that the combination of Watanabe et al and Chen do not teach the tab key and the backspace key to be located in a third row down from the top of the base on pages 14 and 15. The examiner disagrees with that since Watanabe teaches the tab key (TA) and the backspace key(BS) located in a second row down from the top of the base(see figure 1) and Watanabe and Chen teach a row of keys(e.g. F1-F12) would be added on the top of a keyboard (see Watanabe's figure 6A and Chen's figure 1). Watanabe has been disclosed the top row of keys could be added or could be eliminated(see Watanabe's figures 5a, 5b). Therefore, the combination of Watanabe et al and Chen teach both tab and backspace keys to be located in a third row down from the top of the base.

Appellant argues that a Shift key is different from an Alt key on page 16-17. The examiner disagrees with that since a Shift key and an Alt key only have different names, but they perform the same function(they both used in combination of another key to produce some special

Application Number: 09/534,474

Art Unit: 2673

feature or function)(see Microsoft Press Computer Dictionary(Third Edition) pages 21, 22 and 433). Therefore, an Alt key can be replaced by a shift key.

Appellant argues that Watanabe does not teach shift keys are located in a lower central portion, three shift keys grouped directly adjacent one other and can be operated by thumbs of a user on page 16. The examiner disagrees with that since Watanabe teach shift keys and Alt keys(replaced by Shift keys) are located in a lower central portion and three shift keys(including Alt keys) grouped directly adjacent one other(see figure 1).

Appellant argues that Harada et al teach Shift key and Alt keys at laterally outward positions of a keyboard on pages 16-17. However, Harada et al also teach shift keys and alternate keys arranged in two rows(see figure 3). Thus, the combination of Watanabe and Harada et al teach three or four shift keys are located in a lower central portion, group directly adjacent one another, and arranged in at least two of the multiple row and being engaged by thumbs of a user.

Appellant argues the combination of Watanabe and Harada et al do not teach one of the plurality of shift keys constitutes a lower most key in the array on page 18. The examiner disagree with that since Watanabe as modified by Harada et al would be arranged Shift keys in two rows, one of the shift keys would be in the most lower button of a keyboard(see Watanabe's figures 1, 5b and Harada's figure 3).

Appellant argues that there is no reference teaches three sequential words in one row. The examiner is in agreement on pages 19-20. However, Montgomery teaches a keyboard having two multi-letter words(I T H E R) came out when read one of rows of selected letter keys

Application Number: 09/534,474

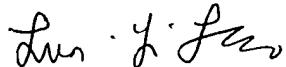
Art Unit: 2673

from left to right(see figure 12). It would have been obvious to put three sequential common words in one row since there would be more convenience for a user to locate those common words; e.g. ITHEROF; so as to increase typing speed words(see Montgomery's column 2, lines 60-61) and provide a special demand for a user. If appellant does not agree it is obvious to have three sequential common words in one row, that means the patent office should issue a patent for a person who have three sequential common words in one row on a keyboard, should issue a patent for a person who have four sequential common words in one row on a keyboard and should issue a patent for a person who have five sequential common words in one row on a keyboard; etc. However, such change would have involved a mere changing in the number of words and it is generally recognized as being within the level of ordinary skill in the art.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

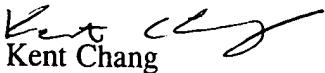
Lun-yi, Lao



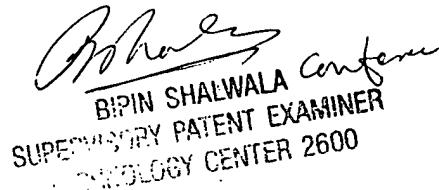
Lun-Yi Lao
Primary Examiner

Conference:

Bipin Shalwala



Kent Chang



BIPIN SHALWALA Conferee
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600